623 342 themselves off and join another house or village. In consequence the size or length of a Dyak house is not limited. To maintain the size of his house a chief has to exercise a great deal of self-denial. He is like a parent who has to make peace among his children and please them equally. His family must share his sympathy.

342 [787] The day following the meeting all the men go out to examine the spot for the site of the house. If it be a good one they *beburong* it at once, *i. e.* they go to hear the cry of a certain bird which prognosticates health, fortune, and good luck. As soon as the good omen is obtained they cut a piece [778] of wood and hang it on the spot where the house is to stand. The spot thereby is considered sacred, being guarded by the *Kayu burong* which is hung thereon.

As soon as the site of the house is cleared they *beramu*, *i. e.* go to get material for the house. The site for the house must not be burnt; jungle that is cut down is cast aside. If the site for the house is burnt it will give less work than in carrying away the jungle that is cut down, but the house is said to be *angat*, *i. e.* it will be visited by plagues and sicknesses. A convenient place is selected for the *palan*. The *palan* is the place for retreat in case of hearing a bad omen when cutting material for the house. Out of every kind of material collected for the building, one piece is cast aside to *ninggang burong*, *i. e.* to plead excuse in case of having neglected bad omens.

The building is done in common as far as putting up the posts and frame-work are concerned. The posts and frame-work are done in a day. It is called [283 824] *ngentak rumah*. One door a day is put up. It is hurried through and every thing is bound by *rotan* or the monkey-cup creeper called *entuyut*. If there be the slightest shower of rain the work is knocked off. To work in the rain when building a new house is to prognosticate the shedding of tears over some misfortune. The *ngentak rumah* begins in the morning and the work is supposed to be finished by one o'clock at midday.

[p. 16]

3: Low G-5 (1844-1847) 1848
OC6 Iban OC6

tened on the outside, being closed when they are at their farms by the mortar in which their rice is cleaned, and which always stands outside the door in the verandah, or some other heavy piece of wood being merely placed against it. The whole of their buildings, though of so substantial and good appearance, are formed and fastened together without the assistance of nails, their place being supplied by rattans and other cordage.

The language of the sea Dyaks, though altogether different in such parts as having not been adopted from the Malay, is merely a less refined dialect of the language spoken over all Polynesia, and its connexion with that of the other wild tribes, particularly those of Sumatra, is easily to be traced. It is not nearly so melodious in sound, or so copious in its extent, as the Malay, though the Dyaks do not scruple to extend it by adding foreign words whenever they find it necessary, so that a great portion of the words of their vocabulary are from the Malay: the intercourse, which has been generally friendly, between the two nations has also encouraged this adoption of foreign terms. Specimens of their language are given in the work of Captain Keppel, from the vocabularies of Mr. Brooke, and as I can vouch for their correctness, it is not necessary to repeat them here. The different tribes into which the sea division of the Dyaks is again separated have each dialects, which differ in a trifling measure from that generally spoken, but as far as I

3: Low G-5 (1844-1847) 1848
OC6 Iban OC6

224 the pigs, in hurrying down the declivity, often receive them in the breast, and being thus staked, soon bleed to death, and are discovered by the Dyaks. The smaller kinds of game, such as porcupines, palandok, or mouse-deer, small pigs, pheasants, and partridges, are caught in springes, and by those alone a clever woodsman can daily supply his family with this kind of food in abundance, the cord made use of for the [283] springes is of their own manufacture, very fine and strong; it is made from the inner bark of several kinds of trees. They have also cage-traps, into which the squirrels and mouse-deer are attracted by choice food, and which fall upon and detain them. Pigeons 223 and other birds are caught with springes and bird-lime placed in the trees which they frequent for food, particularly the different species of 'kayu ara' (Ficus), which are very abundant, and on which the many species of these birds delight to feed.

278 A practice of fishing, used by the Dyaks of all de-226 scriptions, and which has been observed also of the 824 natives of South America, with whom these people have many things in common, deserves particular notice. It is called fishing with tuba, and is thus carried on: large quantities of the tuba being collected, which is the root of a climbing plant (Menispermum), though the same effect is produced by the fruit of a tree grown extensively for that purpose, the tribe intending to fish proceed in their boats to the mouth of a small river, or creek, which has a bar

5: Roth E-4 (no date) 1892 OC6 Iban OC6

for ear pendants ; the helmet of the *galeatus* is used for a sword-buckle.

6. *Fishing.*

The Dyaks are expert anglers, and fishing is with them a favourite occupation. They commence fishing at a very early age, and the habit grows upon them rather than otherwise. They are fond of the water and both swim and dive well. They swim hand over hand like dogs. They never take a header in diving but jump into the water upright, sinking feet first.

Diving for Fish.—They often catch the fish in the upper waters by diving into the rocky pools and pulling them out of the holes and crevices. The *semu* especially are caught in this way.

Curing.—The women cure the fish. They either dry it in the smoke of a wood fire, or cut it up and boil it in brine and so preserve and pickle it, making *makasam ikan*.

Scoop net.—The scoop net is used chiefly by the women who are fond of wading up the shallows, net in hand and basket *suitong*, slung from the shoulder, scooping up the prawns and periwinkles, &c., that come in their way. Sometimes they drop the fish into a hollow gourd which they carry.

Casting net.—The *jala* or casting net in ordinary use is made of *tengang* string dyed claret colour, with *samak* to preserve it, and is weighted with stones if nothing better is to be obtained.

Angling.—They fully understand the use of a bait and invariably bait their hooks. Fish lines are made of the *apieng* palm.

The *Fish-spears* in use are the *penawan* and *serampang*; the penawan is simply a barbed spear with a slender iron fore-shaft; the serampang is a forked spear furnished with a long bamboo shaft, and with either two or three metal prongs.

The *Fish-traps* in every-day use are the *bubu* and *abau*. They are both of stiff basket work and resemble an acorn in shape; the only difference between them is that of size; the latter being infinitely the larger. The traps are made of the ribs of the apieng palm.

Fishing by torchlight.—Another mode of fishing is to creep along the bank in a canoe after dark with a torch in one hand and a fish spear in the other, to stick the mudfish as they rise to the surface confused by the light. Prawns are also caught in this fashion but with a hand net.

7:Gomes M-5 (ca. 1890)1911 OC6 Iban OC6

cotton snap and the bar fix itself in the animal's inside, nothing can save the brute.

The formidable teeth of the crocodile are not able to bite through the rope attached to the bait, because the *baru* fibres of which the rope is made get between his pointed teeth, and this bark rope holds no matter how much the fibres get separated.

Professional crocodile catchers are supposed to possess some wonderful power over the animals which enables them to land them and handle them without trouble. I have seen a man land a large crocodile on the bank by simply pulling gently at the line. But this is not surprising, as from the crocodile's point of view there is nothing else to do but follow, when every pull, however gentle, causes considerable pain.

The rest of the proceeding is more remarkable. The animal is addressed in eulogistic language and beguiled, so the natives say, into offering no resistance. He is called a "rajah amongst animals," and he is told that he has come on a friendly visit, and must behave accordingly. First the trapper ties up its jaws—not a very difficult thing to do. The next thing he does appears to me not very safe. Still speaking as before in high-flown language, he tells the crocodile that he has brought rings for his fingers, and he binds the hind-legs fast behind the beast's back, so taking away from him his grip on the ground, and consequently his ability to use his tail. When one remembers what a sudden swing of the muscular tail means, one cannot help admiring the man who coolly approaches a large crocodile for the purpose of tying his hind-legs. Finally the fore-legs are tied in the same way over the animal's back. A stout pole is passed under the bound legs, and the animal is carried away. He is taken

7:Gomes M-5 (ca. 1890)1911 OC6 Iban OC6

[Facing p. 128]

DYAK GIRL SPINNING

She is seated on a mat, in a characteristic attitude, and is making yarn out of the cotton, using a primitive spinning-wheel.

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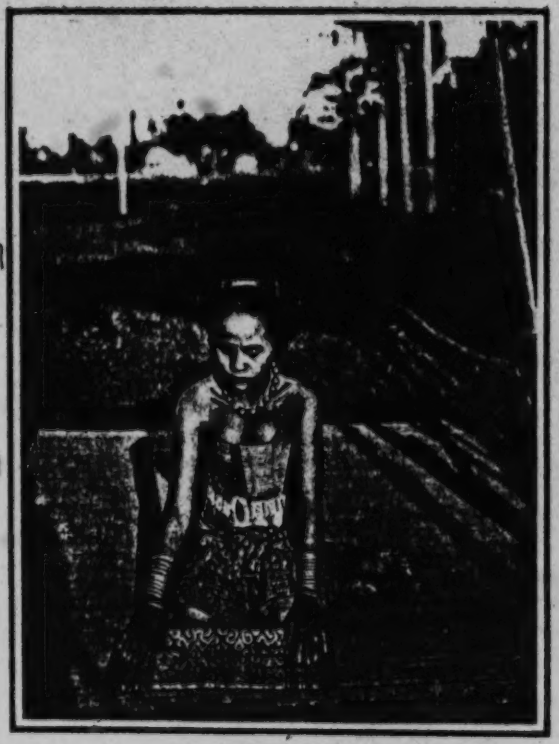
7:Gomes M-5 (ca. 1890)1911 OC6 Iban OC6

[Facing p. 290]



A Dyak Girl

Seated on a mat and folding up a petticoat before putting it away. The girls are very careful of their clothing and are often very vain, but when they are married they frequently become very untidy. A woman's wardrobe is not extensive. It consists of two petticoats and one jacket as a general rule.

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Scraping Palm Leaves for Fibre

With this the women tie up the threads they weave, so that when they are dipped in any particular dye the parts which are tied may not be affected by the dye. It is by this means that the different patterns in Dyak cloth are obtained.

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mallet, which is grooved in deep cross cuts on its broad surface. This hammering breaks up the tissue of the bark and makes it more pliant but also accentuates any holes or rents, which are strengthened transversely by darning lines and patterns with thread made from the fibre of pineapple leaves or imported material (fig. 1).

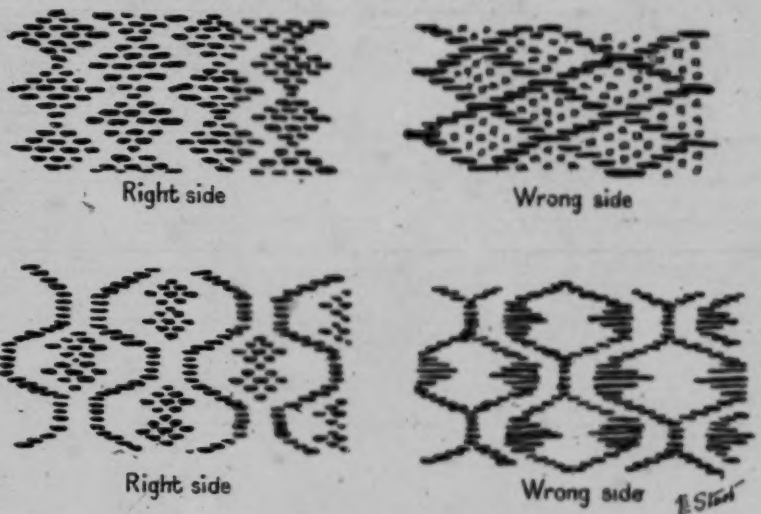

Fig. 1. Two patterns in transverse darning on a bark-cloth sleeveless jacket, open down the sides. British Museum (3425).

COTTON CLOTH

The cloths which are used for garments are usually of purely native manufacture and are entirely the work of the women, from the setting of the cotton seed to the making up of the garment when the cloth has been woven. The men make the wooden beams, battens, heddles and spools used in weaving, but otherwise take no part in the work.

In order to make our account more complete we incorporate information given by the Rev. W. Howell (1912, p. 61) which has not been recorded by other writers. He says that "separate farms or gardens (*empalai*) are set apart for growing cotton (*taya*). . . . After the cotton has been picked, taken

out of its skin and dried, it is passed through a cotton gin (*pemigi*) in order to get rid of its seeds" and fragments of husk. 248

The gin consists of two small wooden rollers which revolve in opposite directions, each with a crank-like handle, fixed into the two upright supports of a frame (fig. 2). Extra strips of wood are generally fixed above and below 407

[283]

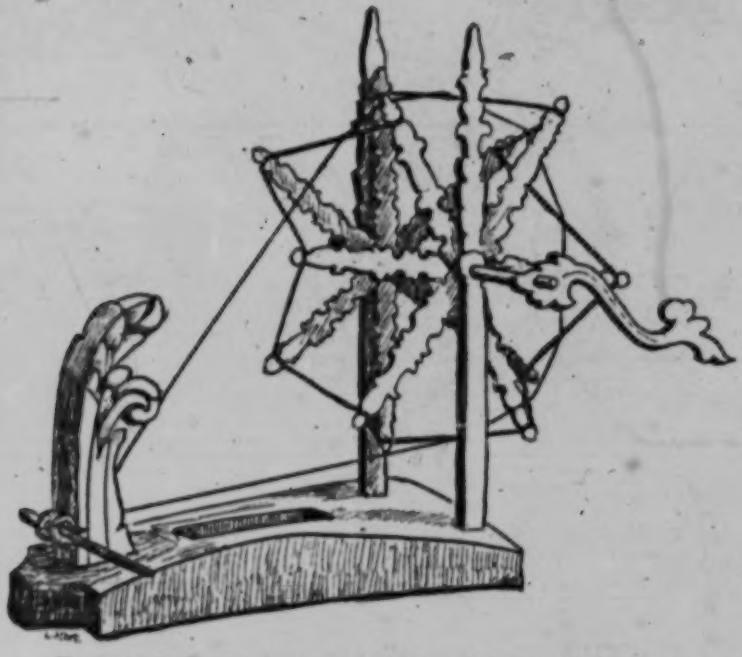

Fig. 3. An Iban spinning wheel, *gasing*. Museum of Ethnology, Cambridge, Haddon collection, Z. 2355.

the rollers to ensure sufficient pressure, and these are tightened by wedges. A similar form of gin is used throughout Indonesia and the Malay peninsula. The yarn is then spun from the mass of fibre.

The simple spinning wheel, *gasing*, is turned by the right hand, the fibre being twisted with the left hand (so Hose and McDougall say, 1, p. 221, but their pl. 119, owing to the method of reproduction, shows the reverse 283

283 action. Gomes (1911), pl. p. 128, gives the same photograph in the correct position). The wheel, which has a shaft passing through two uprights at one end of the stand, consists of two elements, each composed of three flat wooden spokes which cross at their centres and are so arranged that one set alternates with the other (fig. 3). A strong thread is carried across alternately from the ends of the spokes of one element to those on the other, forming a zigzag which is the periphery of the driving wheel. At the other end of the stand there is a support on which the spindle is mounted horizontally; in the one here illustrated it passes through two rings attached to the support and so can rotate freely. The two rings are placed on either side of a long vertical hole near the base of the support through which the endless belt of cord, which goes round the driving wheel, passes to the spindle. The rotation of the spindle supplies the necessary twist to the drawn-out fibre. The process is intermittent, since each length or stretch of yarn has to be wound on to the spindle before another length is spun. When the spindle is full the thread is wound off into a ball or on to a separate piece of wood (pl. xxiv, *a*, *b*).

283 114 A more elaborate method, similar to that used in Java, is described by Howell, who says that after ginning, the cotton is threshed out on a mat with a cotton-beater (*pemalu taya*), the women using both hands for the work; this is done only very early in the morning. The cotton is threshed to form a flat mass, *lapis*, averaging 2 to 3 ft. square and some 2 in. in thickness. In the evening the *lapis* is folded and placed on the thigh to be cut into very thin pieces, which are put into a basket. The following morning the pieces are put on a mat and are again threshed till the *lapis* are reduced to the thickness of a sheet of thick paper. Later the *lapis* is to be *diluli*, that is, to be rolled up into the thickness of a finger so as to be ready for spinning. A *luli* is a pointed stick from 6 in. to 1 ft. long and no thicker than a little finger. After the *lapis* is rolled round the *luli* twice or thrice, it is cut off and placed in a basket. The cotton thus rolled is also called *luli*. The *luli* are then attached to a spinning wheel (*gasing*) and spun into a thread one by one.

We hesitate to criticize any statement by the Rev. W. Howell, but he seems to be describing the Javanese method of preparing and spinning the cotton (cf. Loeber, 1903, pl. II, 3, 4, which show the thrashing and the *luli*,

but not the rolling, in Java). No other accounts or illustrations give any indication of the Iban employing this method. We have consulted a cotton spinner of great experience, who says that the continual thrashing of the cotton and the cutting up into *luli* would break and weaken the fibres, which would be detrimental to making a good thread in spinning and would not produce yarn of the quality used in the Iban cloths. 283 ● 114

"When the shuttle-pin [this is an impossible term. The Iban use a spool and not a shuttle in weaving. Howell is referring to the spindle] (*mata gasing* or 'eye of the spinning-wheel') is full up the thread is stretched in the *koali* or cotton-stretcher. It is then taken out and dipped in rice gruel (*kanji*) for some little time—this is called the process of *nyikat*; after being well saturated it is taken out and stretched lengthways in the *ruai* [the verandah or long reception room of the house] by means of two bamboos. After this it is combed with a cocoanut husk in order to smooth it and to take off any rice grains that are sticking to it; it remains thus until quite dry, when it is rolled up into a ball or balls; this last process being called *nabu*. The thread is now ready for the further processes of dyeing and weaving" (Howell, p. 62).

According to Howell (but no one else records it), the thread is unrolled from the ball and "stretched in the loom to ascertain the length and breadth of the cloth to be woven; this process is called *mungga*. This being ascertained the thread is carefully taken out of the loom as it is, and fixed to the *tangga ubong* or 'the ladder of the thread'".

The tying frame, according to Hose and McDougall (1, p. 221), is usually about 6 ft. [183 cm.] long and 20 in. [50·08 cm.] wide. That in the British Museum (96.3.17) is 5 ft. 7 in. long and 9½ in. wide; it is figured by Loebèr, 1903, pl. III, fig. 4. Our specimen (pl. XXVI, A) has a total length of 8 ft. and is 1 ft. 4 in. wide; the cross bars for the longer warp threads are 4 ft. 7 in. apart, the others are 7 in. shorter. Cross bars are fixed to the frame the distance apart required for the length of the cloth to be woven and the yarn goes round them from end to end. 283

If the cloth is to be plain, the web is set up in the loom, but if a self-coloured cloth is required, such as the dark blue worn by widows, the yarn is dyed before it is set up in the loom; there are, however, cases where a patterned cloth has been re-dipped in a blue dye. 283 386

283 386 The following technique is employed for the production of the pattern-dyed cloths which have a rep or poplin weave, that is, the warps form the surface of the cloth.

The patterns are produced by a resist method, the parts of the web to be [824] reserved from any dye being tied with a dried strip of a fibrous leaf known as *lemba*. This fibre is stripped from the underside of a broad-leaved plant with yellow flowers (*Curculigo latifolia*) which grows in great abundance on old cultivated fields near houses.

As the continuous warp is wrapped right round the cross bars there is an upper and a lower web; the threads from both are tied together and so a repeat of the pattern is obtained. A skein of the *lemba* fibre can be seen attached to one of the lower cross bars in pl. XXVI, A.

As will be evident from the elaborate designs shown in the *bidang* and *kalambi* cloths illustrated later, quite a small number of warps may be tied together, six or eight, and the distance tied up may be very short. The work is often highly skilled and the women usually work from memory without the aid of any pattern, although the Rev. A. Horsburgh (1858, p. 43) says "the Balaus women sketch out the design on the extended web", see Gomes (1911, p. 52). A portion of the tied-up warp is shown in pl. XXVI, B.

When all the parts intended to be left undyed are tied up, the looped ends of the warp are also tied tightly, although already held securely by the [314] numerous wrappings. The web is then immersed in the dye bath, which is most probably of a brown colour from *pinang* (*Areca catechu*) or of a richer red brown from the mangrove. After soaking in the dye for the required length of time, which may be a few hours or several days, according to the depth of colour needed, the web is stretched out to dry in a shady place. When dry the fibre is cut and stripped off and the design then appears in the natural colour of the cotton, on a dark-brown background.

Several dyeings sometimes take place so as to produce a number of shades and colours.

The yarns for the self-coloured stripes in the borders are dyed separately, and when all are dry the web is set up in the loom with these specially dyed yarns arranged to form warp stripes.

The following description of the technique of warp tie-dyeing is taken from Howell (1912): The first process of *kebat* [or *ikat*, "tying"] is to retain the

white colour of the future pattern. After this is done the *kebat* thread is taken out of the *tangga ubong* and dipped into *engkerbai* water for a night and then dried; this is a mixture made by boiling the leaves of the *engkerbai* shrub and mixing some *chunam* [lime] with it; this gives a reddish colour to the thread. After it is quite dry the thread is fixed again to the *tangga ubong* and *kebat* for the second time. This second *kebat* is to retain the reddish colour for the pattern, and is called *mampul*. The thread is again removed and dipped into *tarum*, indigo water, which is made from the indigo plant in the same way as the *engkerbai* water; this gives the exposed portions of the thread a black colour. After it is quite dry it is fixed for the last time to the *tangga ubong* to undergo *ngetas tampok lemba*, "the cutting off of the knots", that is, the cutting of the knots of *lemba*. This accomplished, the thread is carefully put into the loom for weaving.

The use of tie-dyeing by other peoples is mentioned on pp. 138–142.

WEAVING

The *tumpoh* or loom used for weaving is extremely simple, being the most primitive form in Indonesia (Ling Roth, 1918, p. 65). Its component parts are a warp beam, breast beam, heddle, shed stick, beater-in, a back strap, and two or four laze rods (fig. 4). As there is no rigid framework the warp beam can be set up wherever there are two convenient upright posts, usually on the *ruai*, the verandah or long reception room. The breast beam, being attached to a back strap that goes round the weaver's waist, lies almost in her lap and so by a slight movement of her body she can manipulate the tension on the web (fig. 4).

The warp is wrapped continuously round the warp and breast beams and the threads are prevented from becoming entangled by one or two pairs of laze rods, the odd threads or odd groups of threads being first lifted and one rod passed through, and then the evenly numbered threads are lifted and another rod is passed through the new shed. The ends of each pair of laze rods are usually tied together by a cord. Cane heading rods are also frequently used at the commencement of the weaving to keep the warps evenly stretched. There are generally a few rows of weaving between the two rods, if more than one is used. The raising of alternative warps, or groups of warps, is effected by a shed stick and the single heddle, to which one set of

The motives in the badge (fig. 24) represent *lelambak anyam*, a flower similar to that plaited in mats (pl. XXII, *h*), and *dabong lilit*, a dog-tooth pattern in gold thread. 291 531 X

35.901. *Baju sungkit*, an embroidered jacket worn by women; it was made by a Nabai Iban woman.

A plain cloth jacket dyed reddish brown with an applied panel called *tandar* on the upper part of the back, which is much of the same type as the embroidered ends of *sirat*. The white cloth is of coarse texture and the panel is outlined with an inner strip of scarlet flannel and an outer one of yellow flannel. The designs are boldly embroidered in red and blue. A narrow upper border consists of a zigzag, *lelingkok*, with a *pala buntak*, "head of locust", on each apex. The lower border is labelled *pemuchok tubu*, shoot of bamboo. We have no information concerning the design of the broad central band, which is exactly like that on a "little girl's jacket, from Batang Lupar", figured by Ling Roth, II, p. 33.

35.911. Shell *kalambi*. The jacket in figs. 25, 26 is entirely decorated with *buri* shells (*Nassa* sp.) and is an exceptionally fine example of this method of ornamentation, which is now almost obsolete, European buttons being used instead. An immense amount of labour has been expended on the preparation of the shells, for the spire of each has been ground away, leaving a flat piece about $\frac{1}{16}$ in. in thickness containing the mouth of the shell. A second hole was bored and each shell was then secured to the cloth by two stitches made with strong twine (the fibre of pineapple leaves), one through the aperture and down the drilled hole, the other fastening down the narrow end. 291 321 531 X [283]

The foundation of the garment is an indigo-dyed cotton cloth backed with a much coarser native cloth in order to give sufficient support for the weight of the shells. The front edges, side seams and armholes are further decorated by being bound with red cloth. 291 531 X

A very primitive and effective method of fastening is provided by means of three roughly shaped flat wooden discs on the right-hand side; each disc has a hole in the centre through which a string is knotted to hold it in place. There are corresponding loops on the left-hand edge made by tying a piece of twine through the back of a few stitches.

This jacket was originally the property of a Baju Bari Dayak from the Baram river, but there is no information whether it was a man's or a woman's